

1. First, find the equation of the line containing the two points below. Then, write the equation in the form $y = mx + b$ and choose the intervals that contain m and b .

$$(10, 9) \text{ and } (2, -4)$$

- A. $m \in [1.62, 7.62]$ $b \in [-7.32, -6.9]$
 - B. $m \in [1.62, 7.62]$ $b \in [-6.14, -5.46]$
 - C. $m \in [1.62, 7.62]$ $b \in [6.74, 7.29]$
 - D. $m \in [-4.62, -0.62]$ $b \in [-0.91, 0.3]$
 - E. $m \in [1.62, 7.62]$ $b \in [-1.54, -0.91]$
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2. Solve the equation below. Then, choose the interval that contains the solution.

$$-11(15x + 4) = -7(2x + 18)$$

- A. $x \in [1.1, 1.29]$
 - B. $x \in [-0.99, -0.75]$
 - C. $x \in [-1.81, -1.09]$
 - D. $x \in [0.54, 0.79]$
 - E. There are no real solutions.
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3. Solve the equation below. Then, choose the interval that contains the solution.

$$-8(-9x - 19) = -16(2x + 11)$$

- A. $x \in [-0.37, 0.13]$
- B. $x \in [0.17, 0.39]$
- C. $x \in [0.53, 1.1]$
- D. $x \in [-3.47, -3.09]$
- E. There are no real solutions.

4. First, find the equation of the line containing the two points below. Then, write the equation in the form $y = mx + b$ and choose the intervals that contain m and b .

$$(7, -3) \text{ and } (-8, -11)$$

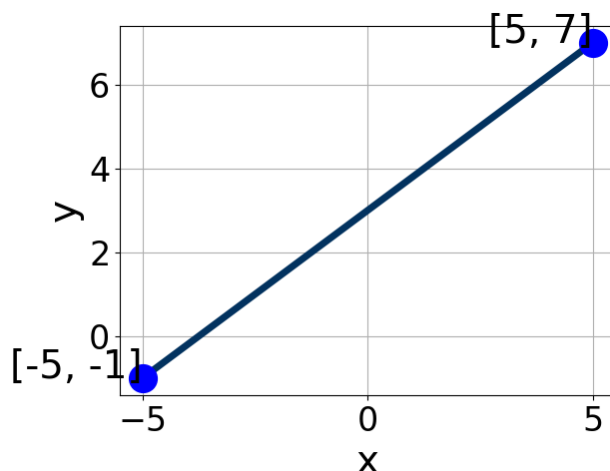
- A. $m \in [-0.94, 0.53]$ $b \in [-17.27, -11.27]$
B. $m \in [0.52, 0.71]$ $b \in [-13, -8]$
C. $m \in [0.52, 0.71]$ $b \in [-5, 3]$
D. $m \in [0.52, 0.71]$ $b \in [2.73, 8.73]$
E. $m \in [0.52, 0.71]$ $b \in [-7.73, -3.73]$
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5. Find the equation of the line described below. Write the linear equation in the form $y = mx + b$ and choose the intervals that contain m and b .

Parallel to $4x + 9y = 11$ and passing through the point $(-2, -8)$.

- A. $m \in [-0.68, -0.35]$ $b \in [8.15, 10.53]$
B. $m \in [-2.63, -2.21]$ $b \in [-9.38, -8.49]$
C. $m \in [-0.68, -0.35]$ $b \in [-6.29, -5.34]$
D. $m \in [-0.68, -0.35]$ $b \in [-9.38, -8.49]$
E. $m \in [0.21, 1.07]$ $b \in [-7.77, -6.24]$
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6. Write the equation of the line in the graph below in Standard Form $Ax + By = C$. Then, choose the intervals that contain A , B , and C .



- A. $A \in [-3.1, 0.9]$, $B \in [-3, -0.4]$, and $C \in [-8, -1]$
 B. $A \in [-7.1, -2.2]$, $B \in [4.9, 6.3]$, and $C \in [10, 18]$
 C. $A \in [0.7, 7.4]$, $B \in [-7.4, -2.9]$, and $C \in [-18, -13]$
 D. $A \in [-3.1, 0.9]$, $B \in [0.1, 2.7]$, and $C \in [-1, 4]$
 E. $A \in [0.7, 7.4]$, $B \in [4.9, 6.3]$, and $C \in [10, 18]$

7. Solve the linear equation below. Then, choose the interval that contains the solution.

$$\frac{5x + 6}{2} - \frac{7x + 4}{3} = \frac{-4x - 4}{7}$$

- A. $x \in [-7.26, -6.33]$
 B. $x \in [-3.47, -2.8]$
 C. $x \in [-1.27, -0.3]$
 D. $x \in [-8.52, -7.79]$
 E. There are no real solutions.

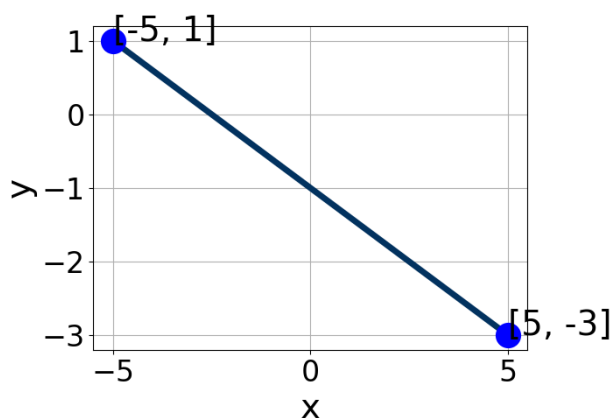
8. Solve the linear equation below. Then, choose the interval that contains the solution.

$$\frac{-7x + 8}{2} - \frac{-5x - 7}{8} = \frac{-6x + 3}{5}$$

- A. $x \in [-2.9, -0.5]$

- B. $x \in [6.7, 7.5]$
- C. $x \in [1.2, 1.8]$
- D. $x \in [2.4, 3]$
- E. There are no real solutions.

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9. Write the equation of the line in the graph below in Standard Form $Ax + By = C$. Then, choose the intervals that contain A , B , and C .



- A. $A \in [-2.53, -1.94]$, $B \in [-5.7, -3.7]$, and $C \in [4.46, 6.57]$
- B. $A \in [-0.18, 1.68]$, $B \in [-0.5, 2.4]$, and $C \in [-2.19, -0.77]$
- C. $A \in [-0.18, 1.68]$, $B \in [-3.2, -0.3]$, and $C \in [0.79, 1.05]$
- D. $A \in [1.39, 2.92]$, $B \in [-5.7, -3.7]$, and $C \in [4.46, 6.57]$
- E. $A \in [1.39, 2.92]$, $B \in [4.8, 5.4]$, and $C \in [-5.32, -3.7]$

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10. Find the equation of the line described below. Write the linear equation in the form $y = mx + b$ and choose the intervals that contain m and b .

Parallel to $3x + 7y = 8$ and passing through the point $(-5, 7)$.

- A. $m \in [-0.99, 0.22]$ $b \in [-4.86, -1.86]$
- B. $m \in [-0.99, 0.22]$ $b \in [-0.14, 5.86]$
- C. $m \in [-3.3, -1.72]$ $b \in [-0.14, 5.86]$

D. $m \in [-0.99, 0.22]$ $b \in [12, 16]$

E. $m \in [-0.39, 0.98]$ $b \in [9.14, 10.14]$
